B. V. SKVORTZOV* and Mitsuzo NODA**: **Xanthophyta e America Borealis et Australis novi et minus cognitae**

B. V. スクボルツォフ*・野田光蔵**: 北米および南米産の黄緑藻 (Xanthophyta) の新種と寡少種

15 species of yellow-green algae (Xanthophyta) collected in 1966 by J. V. Kozloff in Seattle, U. S. A. and by the senior author of the present note in São Paulo, Brasil in 1963-1967 are described and illustrated.

Abbreviations: N. T. Dedusenko-Stschegoleva and M. M. Hollerbach, Xanthophyta, Moskva-Leningrad, 1962—D. H.; Parque do Estado do São Saulo—P. S. P.; B. V. Skvortzov—B. S.; Habitat—Hab.

Hab. 1. in rivulis parte litoralis, intus pontis Aurora, Seattle, Washington, U. S. A., leg. J. V. Kozloff, 12, 9. 1966.

Hab. 2. inter *Microcystis* sp. plancton in lacu montanis artificialis prope P. S. P., leg. B. S., 30, 5. 1967.

Hab. 3. inter *Salvinia auriculata* in parte litoralis in lacu in valle fl. Pinheiros, São Paulo, leg. B. S., 25, 6. 1963.

Hab. 4. inter *Salvinia auriculata* in parte litoralis lacu, prope, Rio Bonito, São Paulo, leg. B. S., 9, 5. 1963.

Hab. 5. inter radicis Gramineae in parte litoralis in lacu artificialis prope Avenida Loutz Washington, São Paulo, leg. B. S., 10, 8. 1967.

Hab. 6. in fossa inter muscis subterrestris, P. S. P., leg. B. S., 27, 4. 1967.

Hab. 7. in parte litoralis lacu montanis, artificialis inter plantas submersis prope, P. S. P., leg. B. S., 17, 1. 1967.

Hab. 8. in qua fontinalis inter *Spirogyra* sp. et *Oedogonium* sp. terrestris prope P. S. P., leg. B. S., 20, 2. 1967.

The type specimens were preserved at the Cryptogamic Section of Botanical Institute, São Paulo, Brasil.

1. **Botrydiopsis intercedens** Pascher ? Fig. 1

in D. H. p. 68, fig. 28, 7-11.

Cells 6-30 micr. in diam.: Chromatophores discoid, blue-green or green-

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brown or yellow-green. Reported from Central Europe. Hab. 1.

2. **Characiopsis reticulata** sp. nov. Figs. 2, 3

Cellula natans vel affixa, 14–20–37×5–8 micr., fusiformis, symmetrica vel asymmetrica cum apicibus attenuatis et acutis, longis vel brevis; stipes adest vel abest; membrana flavo-brunnea vel dilute brunnea; Chromatophoris 2–3, lateralis, longis, lobatis vel reticulatis, viridulo-flavescentibus vel dilute viridibus; granulis olei rubris adsunt; zoosporis 10 in numero, sphaericis, 3–3.5 micr. in diam. vidi. Hab. 1

3. **Characiopsis kozloffii** sp. nov. Figs. 4, 5

Cellulae 10–20–44 micr. lg., variabiles, symmetricae vel asymmetricae, ellipsoideae, angusto-ellipsoideae, fusiformes, substratum affixae; parte anteriore plusminus elongato-acutae cum membrana plusminus incrassata; parte posteriore brevi-stipitata, cum pede curta, gelatinoso, cylindrico, hyalino, basali discoideo, minute substrato affixa, vel non affixa; saepe cellulae coloniae plerumque 6–25 cellulares stellate formante; membrana atro-brunnea, atro-rubra, flavibrunnea vel coerulea crassa; chromatophoris 1–2(3) longitudinalis, lateralis, viridulo-flavescentibus; zoosporis 20–30 in numero, sphaericis, 4–6 micr. in diam. guttis olei atro-rubris, viridulo-flavescentibus vel coeruleis. Affinis *Characiopsis minuta* (A, Br.) Lemm. et *Characiopsis saccata* Carter in D.H. p. 167 fig. 79, 1–4 et fig. 79, 5–8. Dedicavi hanc species in honorem Dom. J.V. Kozloff, botanica, in vestigatores florae Manchuriae et Chinae borealis (1922–1950).

4. **Monodus pascherianus** sp. nov. Fig. 6

Cellula elongata, asymmetrica, ellipsoideis, cum apicibus attenuatis, similaribus vel asymmilaribus 10–18×7–8 micr.; membrana tenuissima, obscuro-brunnea; Chromatophoris 2, viridulo-flavescentibus; granulis olei numerosis, nonnunquam vacuolis adsunt. Dedicavi hanc species in memoriam Dom. Prof. A. Pascher, algologo, Prague, Czechoslovakia. Hab. 1.

5. **Ellipsoidion stichococcoides** Pascher ? Fig. 7

in D.H. p. 75 fig. 31, 5–9.

Cells ellipsoid, 18×12 micr. with rounded ends; Chromatophores about 15, green-yellow; oil granules numerous. Hab. 1.

6. **Characiopsis cedereutzii** Pascher Fig. 8

in D.H. p. 164 fig. 75, 4–6.

Cells subcylindrical with both ends broadly rounded; stipe short; chromatophores 10–12, green-yellow; oil granules dark coloured. Reported from

acid waters in Central Europe. Hab. 1.

7. **Characiopsis seattlensis** sp. nov. Fig. 9

Cellula fusiformis, 20–44×5–10 micr., parte anteriore elongato-acutis et modice curvatis, parte posteriore latior, subito brevi attenuatis sine stipidis; pede lata, disci non vidi; Chromatophoris viridi-flavescens numerosis. Hab. 1.

8. **Characiopsis americana** sp. nov. Fig. 10

Cellula 10–12×3–4 micr., longe ellipsoidea breviter fusiformis cum apicibus plusminus acutis; parte anteriore acuta; posteriore sine stipulis pedatis; cellulae saepe coloniae 5–20 cellulares stellate formante; disci minor, atro-brunnea; chromatophor 1, dilute viridio-flavescens cum granulis olei atro-rubris; membrana atro-brunnea et tenuissima. Hab. 1.

9. **Centritractus lemmermannii** sp. nov. Fig. 11

Cellula recta, cylindrica cum lateris parallelis, 25–30×3–4 micr.; apicibus abrupte attenuatis et longe spinosis; chromatophoris disciformis, 6–12, viridis. Affinis *Centritractus belonophorus* Lemm. in D. H. p. 195 fig. 97, 1–5. in chromatophoris numerosis et affinis *Centritractus africanus* Fritsch et Rich. in D. H. p. 196 fig. 97, 7–9, in membranis non undulatis. Dedicavi hanc species in memoriam Dom. Prof. E. Lemmermann, algologo germanica, Hab. 2.

10. **Centritractus brasilianus** sp. nov. Fig. 12

Cellula cylindracea cum marginibus parallelis, apicibus capitatis et breviter spinosis, 50–55×6–8 micr., membrana tenuissima et brunnea; chromatophor 1 laminatus. Hab. 3.

11. **Centritractus pusillus** sp. nov. Fig. 13

Cellula ellipsoidea vel breviter fusiformis, 25–30×6–7 micr., lateribus plusminus rotundatis, apicibus acutis et breviter spinosis; spinis dissimilaribus, una brevis, cetera fere duplo longior; chromatophor 1. dilute viridio-coerulescens cum granulis numerosis. Affinis *Centritractus capillifera* Pasch. in D. H. p. 197 fig. 97, 10, 12. Hab. 4.

12. **Tetraedriella glabrata** sp. nov. Figs. 14, 15

Cellula tetraedrica cum lateralibus plusminus rotundatis et apice cum papilla, 11–15 micr. in diam.; membrana laevis atro-brunnea; chromatophoris disciformibus, in periphere sine pyrenoide; granulis olei atro-rubris numerosis. Hab. 5.

13. **Tetraedriella papillata** sp. nov. Fig. 16

Cellula tetraedrica, 15–18 micr., cum lateribus constrictis; apicibus brevi-

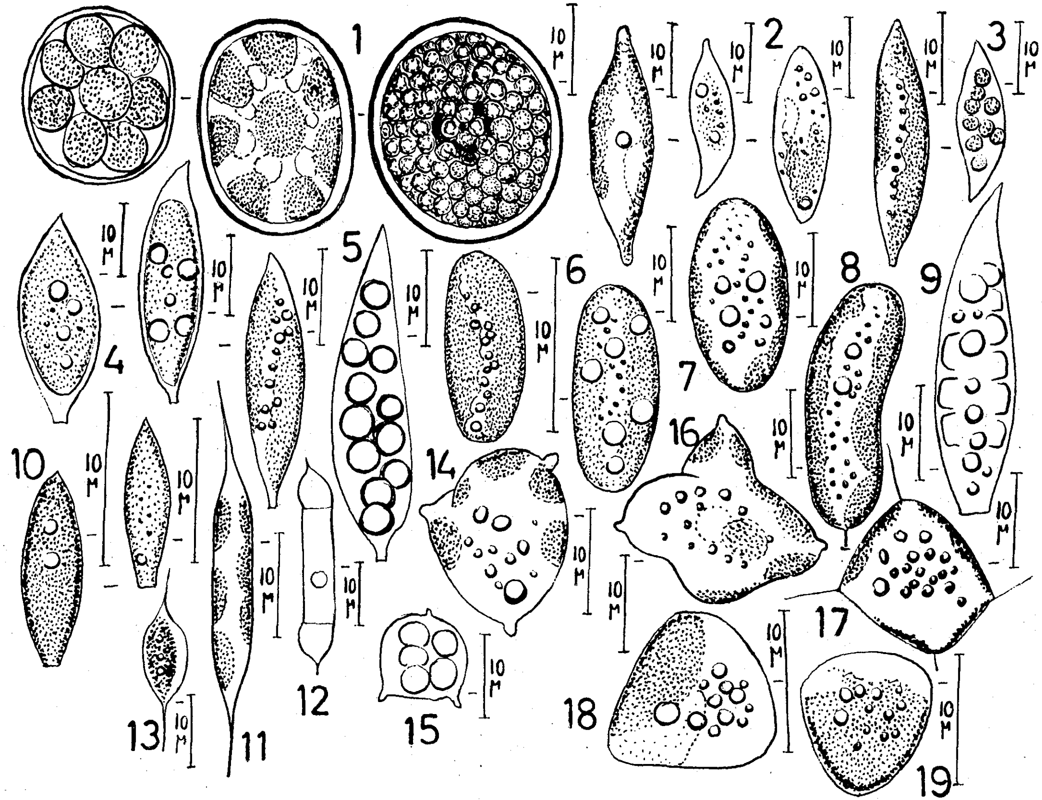


Fig. 1. *Botrydiopsis intercedens* Pasch. 2–3. *Characiopsis reticulata* sp. nov. 4–5. *C. kozloffii* sp. nov. 6. *Monodus pascherianus* sp. nov. 7. *Ellipsodion stichococcoides* Pasch.? 8. *Characiopsis cedereutzii* Pasch. 9. *C. seattlensis* sp. nov. 10. *C. americana* sp. nov. 11. *Centritractus lemmermannii* sp. nov. 12. *C. brasilianus* sp. nov. 13. *C. pusillus* sp. nov. 14–15. *Tetraedriella glabrata* sp. nov. 16. *T. papillata* sp. nov. 17. *T. skujae* sp. nov. 18–19. *T. subtriquetra* sp. nov.

papillatis; membrana atro-brunnea et laevis; chromatophoris disciformibus, viridibus et numerosis; granulis olei adsunt. Affinis *Tetraedriella gigas* (Pasch.) Ded.-Stscheg., p. 113 fig. 50, 1–4. Hab. 6.

14. **Tetraedriella skujae** sp. nov. Fig. 17.

Cellula tetraedrica, 10–12 micr. (sine spinis) in diam., lateribus fere rectis; angulis modice acutis cum spinis longis et tenuissimis; membrana tenuissima brunnea et laevis; chromatophoris viridulo-flavescentibus, periphericis, indistincte discoideis sine pyrenoide; granulis olei numerosis. Dedicavi hanc species in honorem Dom. Prof. I. Skuja, Uppsala, Sweden. Hab. 7.

15. **Tetraedriella subtriquetra** sp. nov. Figs. 18, 19

Cellula tetraedrica cum apicibus rotundatis, 9–10 micr. in diam.; membrana tenuissima, rubriceps; chromatophor 1 dilute viridio-flavescens; pyrenoide nullo; granulis olei atro-rubris numerosis. Hab. 8.

Literatures

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北米および南米ブラジル São Paulo から得られた黄緑藻 (Xanthophyta) に属する 15 種について記載した。そのうち，12 新種と中央ヨーロッパ産の寡少種 3 種が含まれている。

○高等植物分布資料 (62) Materials for the distribution of vascular plants in Japan (62)

○ルリミノキ *Lasianthus japonicus* 先にルリミノキは琉球には知られていないが発見される可能性があるとかいておいた (本誌 **39**: 351)。そのわけは，東大に木村陽二郎，古沢潔夫氏が，1940 年に辺土一与那付近で採集したルリミノキの小枝があるが，小片なので断定をさけたためである。鹿児島大学の標本室に園原咲也氏がヨナハ岳で採集したルリミノキの標本があることがわかった。これはいくらか毛がはえていてサツマルリミノキ型であるが，東大のものは全体無毛でルリミノキそのものである。

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